

Acute HIV Infection

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Learning Objectives:

At the conclusion of this presentation, learners should be better able to:

- Recognize and diagnose acute retroviral syndrome.
- Discuss the pros and cons of antiretroviral treatment during acute and early HIV infection with their patients.

Case: Romance



USA - California - Southern CA San Diego -
Western - **North Park**

[Contact](#)

Profile

No Headline

29, 5'10", 160lb, 31w, Athletic, Brown Hair, Some Body Hair, White, Looking for Friendship, 1-on-1 Sex, Relationship.

Checking things out. Normal athletic guy looking for the same.

Smoke No, Drugs No,

HIV Negative, Prefer meeting at: **My Place.**



Primary

1 2



USA - California - Southern CA San Diego -
Western - **Hillcrest**

[Contact](#)

Profile

34, 6'2", 190lb, 33w, Athletic, Brown Hair, Some Body Hair, White, Looking for Friendship, 1-on-1 Sex, Relationship.

still relatively new to sd. looking for new friends, dates, fun, etc....

Bottom, Safe Sex Only, HIV Negative,

Primary

1 2 3 4



Disclosure as a Prevention Strategy

Does partner serostatus disclosure protect people from HIV infection?

1. Yes
2. No
3. Maybe



Do they ask each other's HIV status?



Disclose of Serostatus by Your Partner in the Network	Risk of HIV Acquisition per act with one 'randomly' chosen Partner
"HIV-" Low Risk Population	23.5 in a million
"HIV-" High Risk Population	412.5 in a million
"HIV+"	395 in a million

When the prevalence of recently HIV-infected individuals in the high-risk population is 4%, there is 17x less risk of acquiring HIV from a member of the group disclosing as HIV positive.

Implementation of HIV Testing at 2 New York City Bathhouses: From Pilot to Clinical Service

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Background. Commercial sex venues (e.g., bathhouses) that cater to men who have sex with men (MSM) continue to function in most urban areas. These venues present a challenge to developing strategies to prevent the spread of the human immunodeficiency virus (HIV), but they also provide opportunities for interventions to reduce the risk and rate of disease transmission. Several cities in the United States have developed programs that offer HIV testing in these venues. Similar programs have not existed before in New York City.

Methods. A pilot HIV testing program was implemented at 2 New York City bathhouses. Testing included rapid HIV testing, the use of the serologic testing algorithm for recent HIV seroconversion, and pooled plasma HIV viral load to detect and date incident and acute HIV infections. In addition to HIV tests, behavioral and demographic data were collected from 493 presumed HIV-negative participants.

Results. The pilot program recruited MSM who were at high risk for HIV infection. Of the 493 men tested, 20 (4%) were found to be positive for HIV, and 8 (40%) of these 20 men demonstrated evidence of acute or recent HIV infection. The program tested men often not tested in more traditional medical settings. Significant disparities were demonstrated in the testing habits of MSM who reported having sex with women and had not disclosed same-sex activities to their caregivers.

Conclusions. Bathhouse-based testing for HIV infection can be implemented in New York City and would include a population of MSM who are at high risk for HIV infection. Because of the high rate of recent HIV infection, expanded testing in these venues may be a good strategy to reduce the forward transmission of HIV in this highly sexually active population.



Case Report: Panic

- SDStudly is a 34 yo man who presents to the Gay Men's Health Clinic.
- He reported an unprotected HIV exposure 32 hours previous where he was the bottom.
- Now he is worried because his male partner *just* disclosed to him that he was HIV+ and receiving ART(after the fact).
- He reports: mild sore throat, fever and full body rash including palms and soles.





What do you do? (Pick Two)

- A. Provide TDF/FTC as PrEP
- B. Provide LPV/r/TDF/FTC as PEP
- C. Order a viral load
- D. Test for STDs including syphilis and GC and Chlamydia at three sites: urethral, rectal and pharyngeal and treat presumptively for syphilis

1. A+C
2. A+D
3. B+C
4. B+D

How do you diagnose acute HIV infection?

1. Rapid Antibody Test
2. Nucleic Acid Test
3. Both

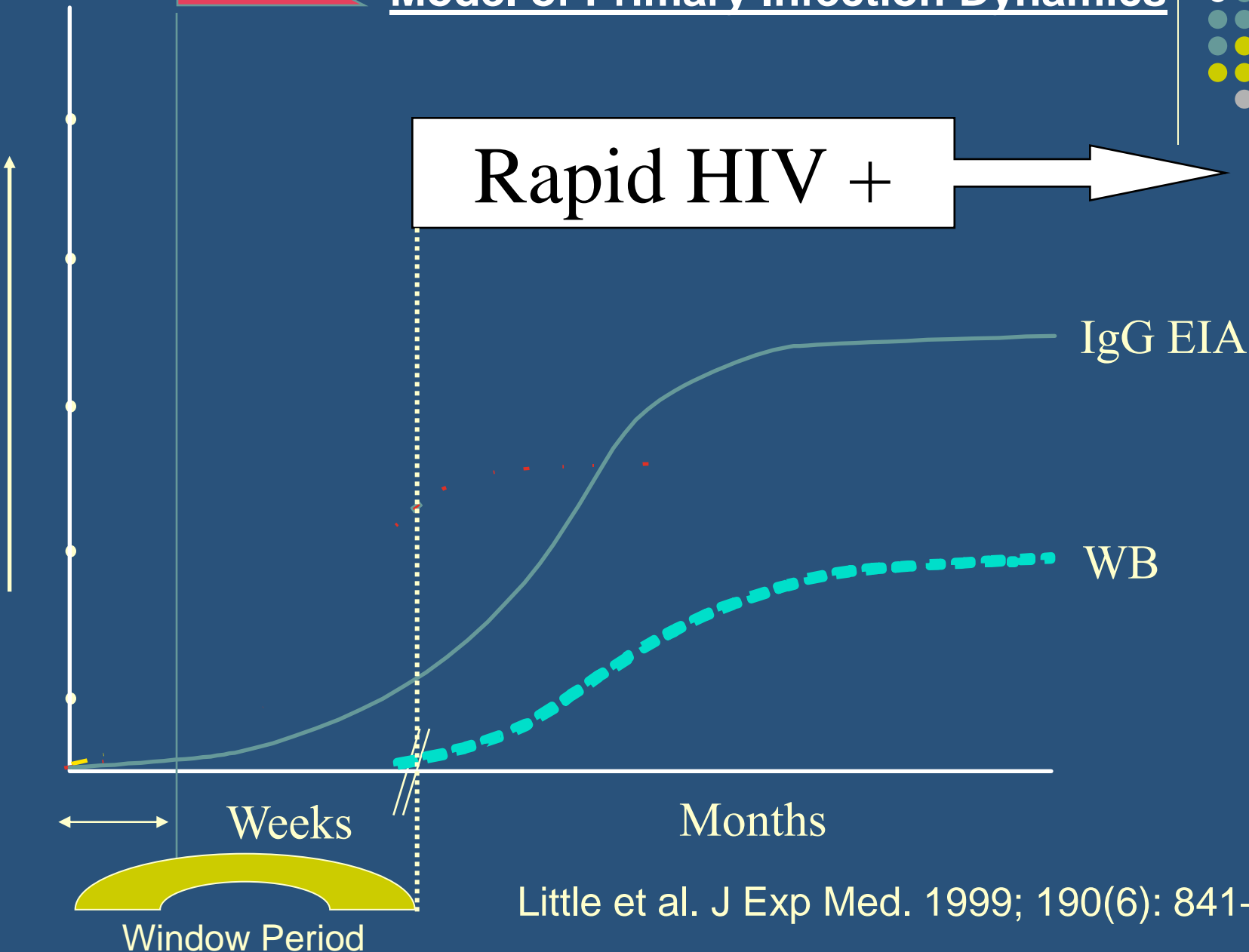


Sx

Model of Primary Infection Dynamics



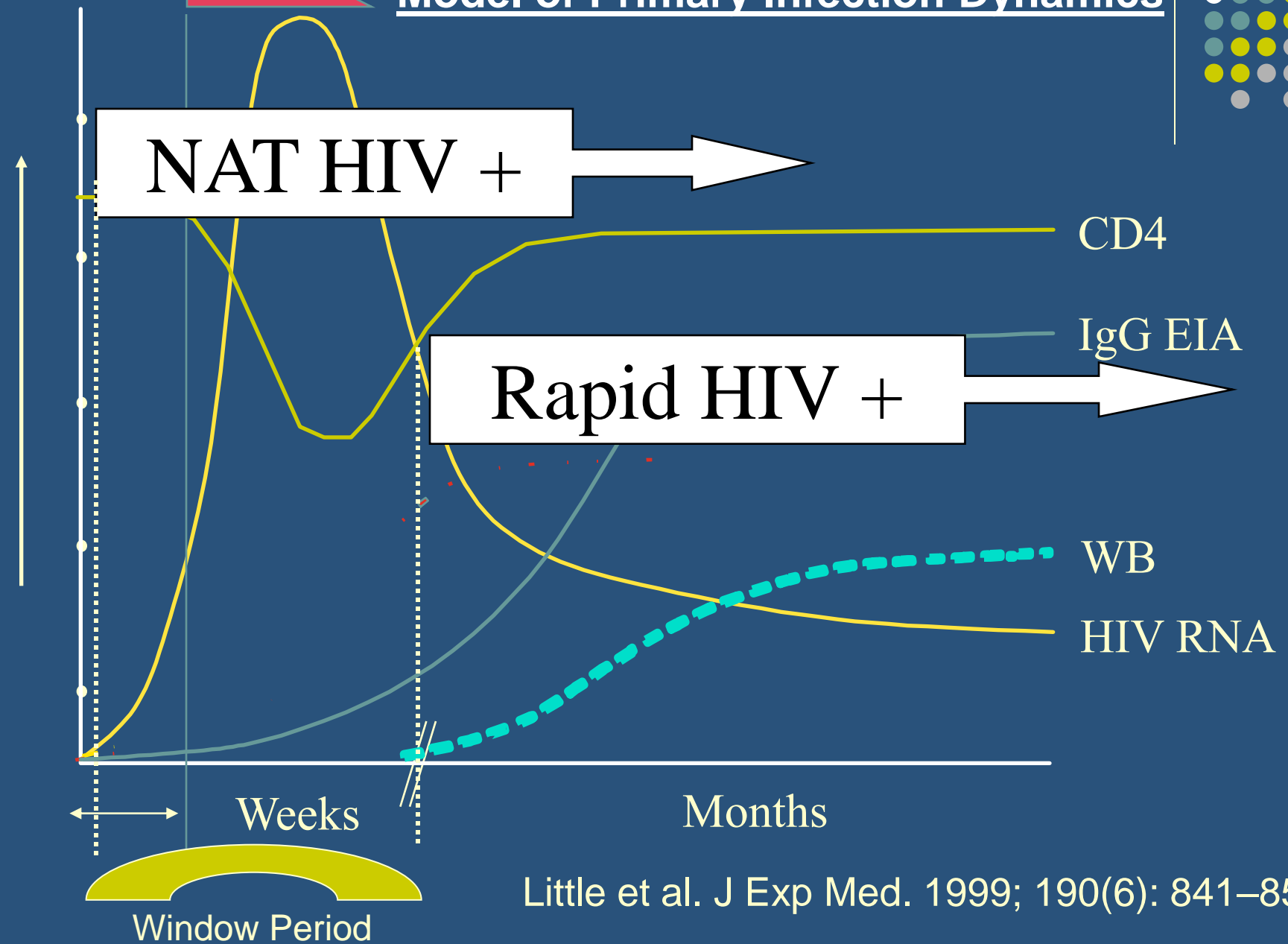
Rapid HIV +



Little et al. J Exp Med. 1999; 190(6): 841–850.



Model of Primary Infection Dynamics



Little et al. J Exp Med. 1999; 190(6): 841-850.

Case Report: Wait

- He was given an Rx for PEP
- Treated for syphilis presumptively and tested for GC/Chalm at three sites, RPR and rapid HIV
- Rapid HIV negative
- Two days later his RPR was positive and GC was positive in his throat, which was treated.
- He was told to come back in one month for re-testing for HIV.

Wednesday
March 26, 2008

A17

Syphilis cases up sharply in county

REPORTED SYPHILIS INFECTIONS BY COUNTY
Sampling of counties with large populations

County	2000	2007	Change
San Diego	28	340	1,114%
Los Angeles	152	827	444%
Orange	28	141	404%
San Francisco	54	202	274%
Alameda	14	39	179%
Statewide	330	2,002	507%

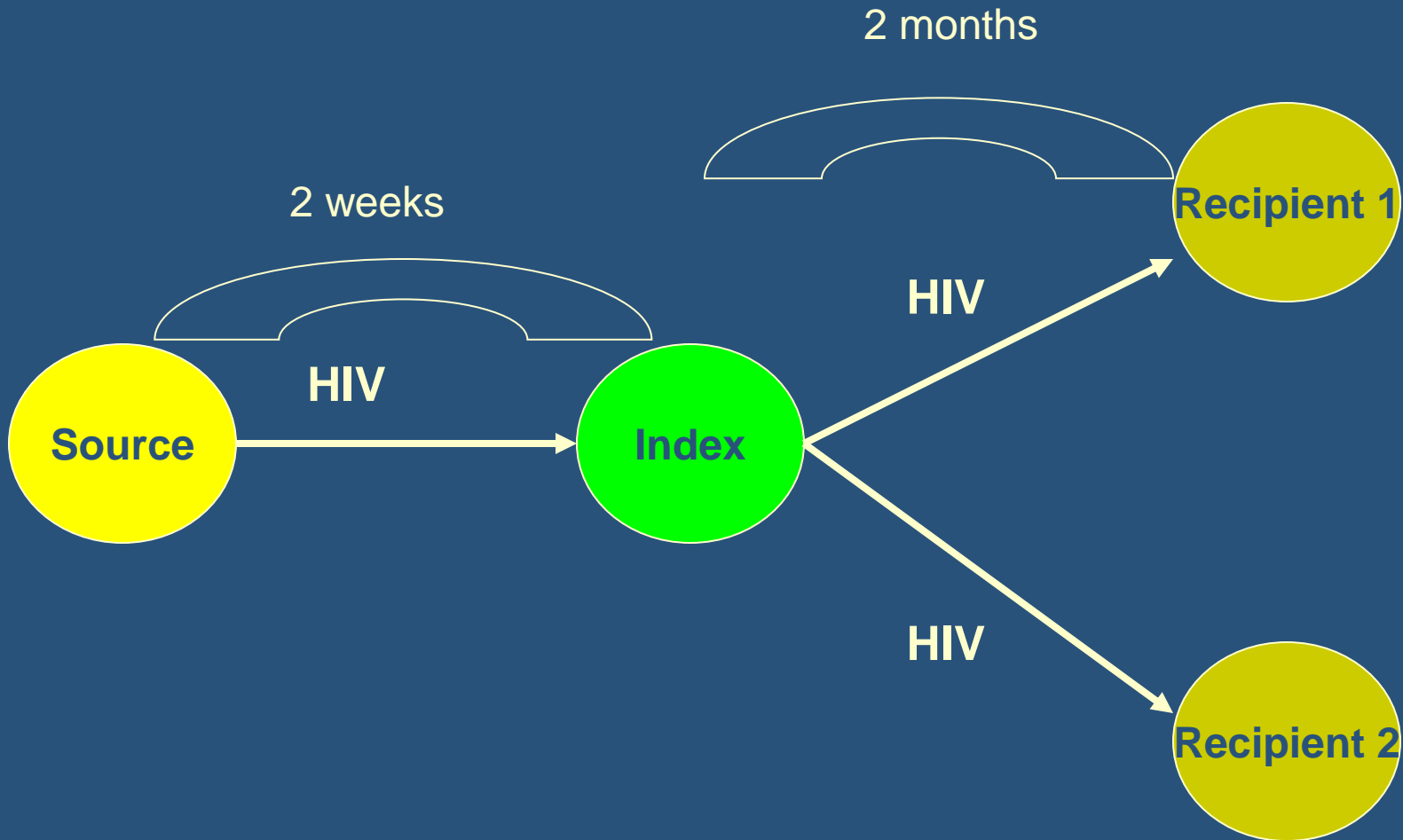
SOURCE: California Dept. of Public Health
MATT PERRY / Union-Tribune



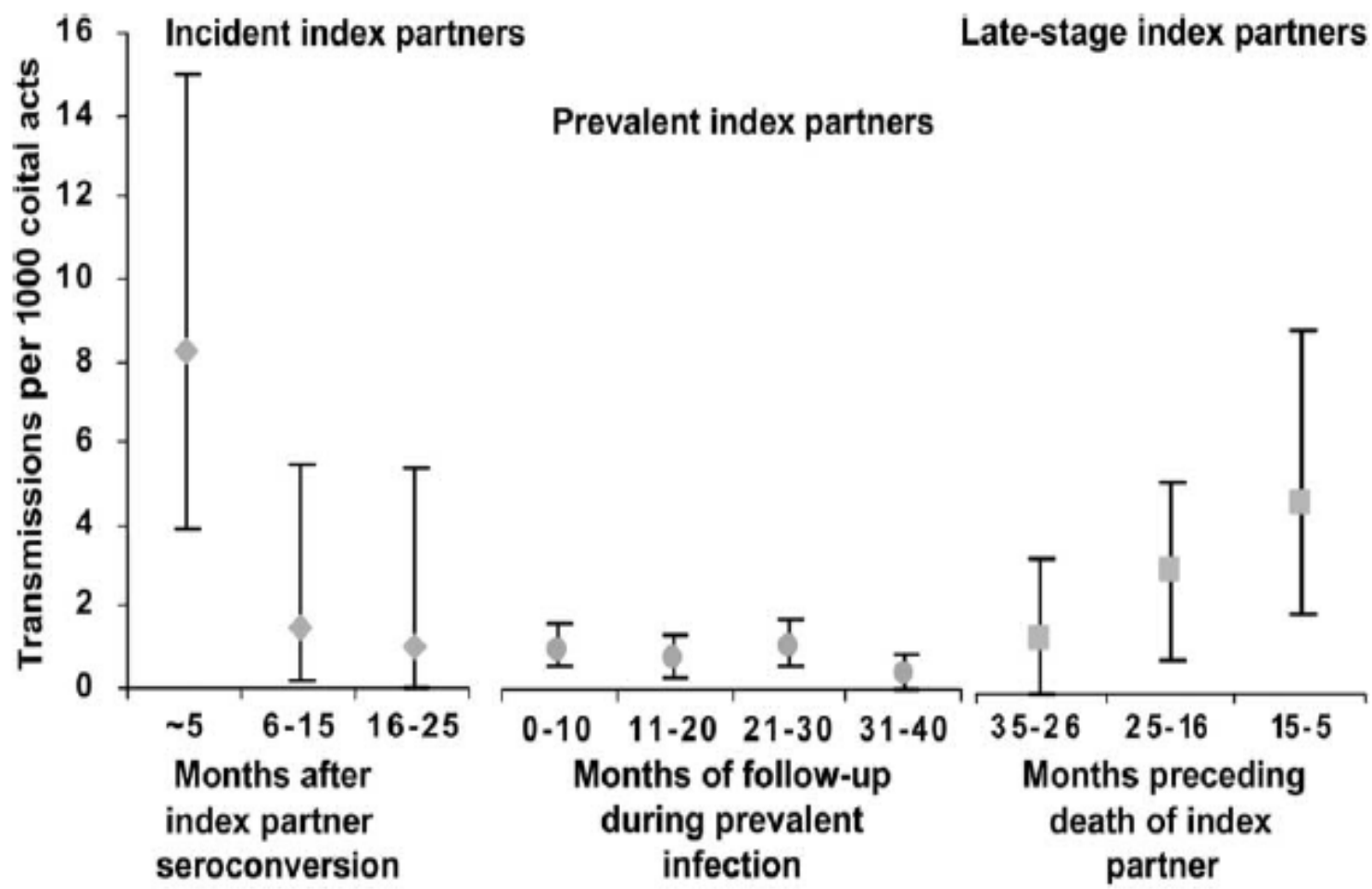
Case Report: Later

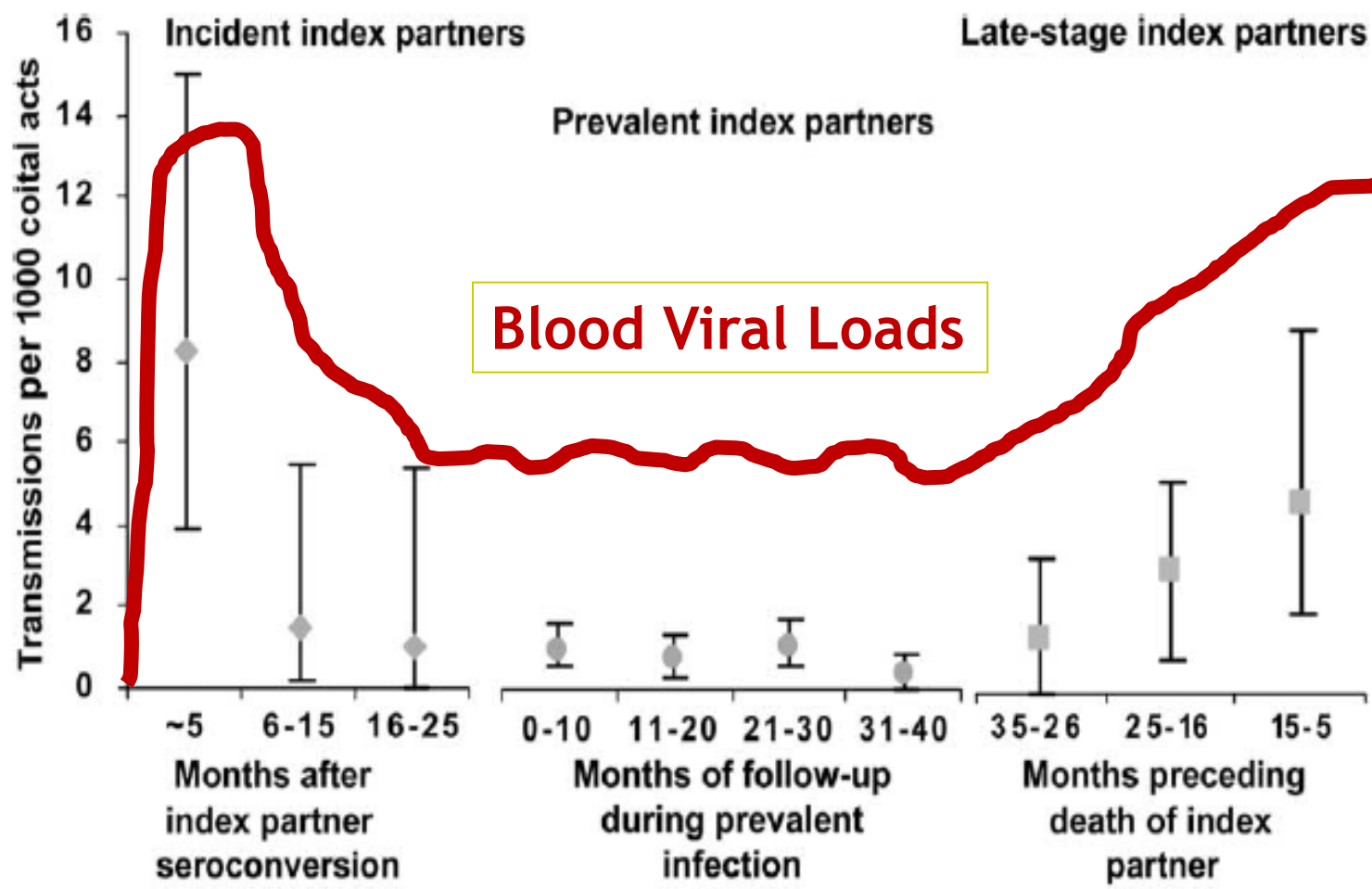
- He reports not obtaining PEP because it was not covered by his insurance.
- Patient returns to clinic 2 months later for repeat HIV testing.
- Standard HIV testing is now positive.
- He reports having 4 new sexual partners since last coming in the clinic.
- Contact tracing finds 2 of them and the original partner.

Transmission Chain



Phylogenetically Linked Transmissions





Quinn T, et al., NEJM 2000; Wawer, MJ., et al., JID: 2005

Which are not in the differential diagnosis of primary HIV infection?

1. Acute EBV
2. Acute CMV
3. Acute Toxoplasmosis
4. Acute HAV
5. Strep Throat
6. Flu
7. None of the above



Primary HIV Infection



- Period of rapid viral replication immediately following exposure
- Symptomatic syndrome in 30-96%

Fever	96%	Headache	32%
LAD	74%	N/V	27%
Pharyngitis	70%	HSM	14%
Rash	70%	Wt loss	13%
Myalgia/arthralgia	54%	Thrush	12%
Diarrhea	32%	Neuro Sx	12%

- Seroconversion typically within 50d

To
Friends Who Are
Not
Here

